Listing of Claims:

Claims 1-29 (Canceled).

30. (Currently Amended) An ophthalmologic instrument ~~intended~~ for measuring ~~the~~ aberrations of ~~the~~ a human eye, comprising:

a point light source which is projected onto ~~the~~ a retina of the eye to create a virtual light source thereon ~~on it~~, ~~the~~ wherein radiation of ~~which~~ the virtual light source is scattered by the retina [[,]] and then passes through ~~the~~ optical systems of the eye and becomes phase-modulated, and wherein the modulation ~~corresponding~~ corresponds to ~~the~~ a total of optical aberrations of the eye;

a measuring system for measuring ~~the~~ a shape of ~~the~~ a wavefront of the radiation leaving the eye, ~~the~~ and outputting an output signal ~~of which is passed~~ to ~~the~~ a control system of the instrument;

a system for compensating for said aberrations, located between the eye and the measuring system and transmitting the radiation leaving the eye, ~~which~~ wherein said system comprises a refraction compensator that controls focusing of the radiation scattered by the retina and an astigmatism compensator located at ~~the~~ an image plane of ~~the~~ a pupil of the eye;

a projector of test patterns, which, jointly with said ~~compensators~~ refraction compensator and astigmatism compensator, projects ~~the~~ an image of a test pattern onto the retina.

31. (Currently Amended) The instrument of claim 30, wherein the refraction compensator comprises a movable prism and a dichroic mirror which are placed between two lenses, and wherein said dichroic mirror ~~also serving~~ is operable as a beam-splitter ~~used~~ to align the instrument.

32. (Currently Amended) The instrument of claim 30, wherein the astigmatism compensator comprises: (i) one of two cylindrical ~~or~~ lenses of opposite signs and two toric lenses of opposite signs, ~~which can be~~ wherein said lenses are independently ~~rotated~~ rotatable around ~~the~~ an optical axis of the compensator, and (ii) a system for ~~precisely~~ setting ~~the~~ initial turning angles of said lenses.

33. (Currently Amended) The instrument of claim 30, further comprising a built-in automatic calibration system which uses an additional virtual light source as a test element ~~that allows precisely measuring the~~ to measure current positions of the compensators.

34. (Currently Amended) The instrument of claim 30, further comprising an alignment system which ~~allows adjusting the~~ adjusts a proper distance between the eye and the instrument.

35. (Currently Amended) An ophthalmologic instrument ~~intended~~ for measuring ~~the~~ aberrations of ~~the~~ a human eye, comprising:

a point light source which is projected onto ~~the~~ a retina of the eye to create a virtual light source thereon, ~~on it, the~~ wherein radiation of ~~which~~ the virtual light source is scattered by the retina [[,]] and then passes through ~~the~~ optical systems of the eye and becomes phase-modulated, and wherein the modulation ~~corresponding~~ corresponds to ~~the~~ a total of optical aberrations of the eye;

a measuring system for measuring ~~the~~ a shape of ~~the~~ a wavefront of the radiation leaving the eye, ~~the~~ and outputting an output signal ~~of which is passed~~ to ~~the~~ a control system of the instrument;

a system for compensating for said aberrations, located between the eye and the measuring system and transmitting the radiation leaving the eye, ~~which~~ wherein said system comprises a refraction compensator that controls focusing of the radiation scattered by the retina, an astigmatism compensator located at

~~the~~ an image plane of ~~the~~ a pupil of the eye, and a compensator of high-order aberrations;

a projector of test patterns, which, jointly with said ~~compensators~~ refraction compensator, astigmatism compensator and compensator of high-order aberrations, projects ~~the~~ an image of a test pattern onto the retina.

36. (Currently Amended) The instrument of claim 35, wherein the refraction compensator comprises a movable prism and a dichroic mirror which are placed between two lenses, and wherein said dichroic mirror ~~also serving~~ is operable as a beam-splitter ~~required~~ to align the instrument.

37. (Currently Amended) The instrument of claim 35, wherein the astigmatism compensator comprises: (i) one of two cylindrical ~~or~~ lenses of opposite signs and two toric lenses of opposite signs, ~~which can be~~ wherein said lenses are independently ~~rotated~~ rotatable around ~~the~~ an optical axis of the compensator, and (ii) a system for precisely setting ~~the~~ initial turning angles of said lenses.

38. (Currently Amended) The instrument of claim 35, further comprising a built-in automatic calibration system which uses an additional virtual light source as a test element ~~that allows~~

~~precisely measuring the~~ to measure current positions of the compensators.

39. (Currently Amended) The instrument of claim 35, further comprising an alignment system which ~~allows adjusting the~~ adjusts a proper distance between the eye and the instrument.

Claims 40-43 (Canceled).